

Claims:

1. A clock generating method for an asynchronous transmission, comprising the steps of:
 - determining a plurality of actual signal arrival times;
 - averaging said plurality of actual signal arrival times; and
 - correcting a timing of a receiving clock on the basis of said average of the signal arrival times and an expected signal arrival time.
2. A method according to claim 1,
 - wherein said expected signal arrival time is derived from said receiving clock.
3. A method according to claims 1 ~~or 2~~,
 - wherein said determining step comprises counting a time period between the arrival of a first and the arrival of a subsequent second signal.
4. A method according to claim 3,

- 13 -

wherein said averaging step comprises storing said counted time periods and calculating an average of said stored time periods.

b 5 5. A method ~~according to any one of the preceding~~ ⁱⁿ ¹ ~~claims~~ ²,
wherein said correcting step comprises determining a
difference between a frequency corresponding to said average
of said plurality of actual signal arrival times and a
frequency of said receiving clock, and changing the frequency
10 of said receiving clock according to said frequency
difference.

b 6. A method ~~according to any one of the preceding~~ ⁱⁿ ¹ ~~claims~~ ²,
wherein the asynchronous transmission is an ATM
15 transmission and the signal is an ATM cell.

7. A clock generating apparatus for an asynchronous
transmission, comprising:

determining means (20) for determining an average of
20 actual signal arrival times and for generating a control
signal on the basis of said determined average of the actual
signal arrival times and an expected signal arrival time; and
correcting means (40) for correcting a timing of a
receiving clock on the basis of said control signal.

25

8. An apparatus according to claim 7,
wherein said correcting means comprises a voltage
controlled oscillator (40).

b 30 9. An apparatus according to claims 7 ~~or 8~~,
wherein said determining means (20) comprises:

- 14 -

detecting means (21) for detecting an actual arrival time of a signal;

averaging means (23) for averaging a plurality of detected actual signal arrival times in order to obtain said
5 average of the actual signal arrival times; and

correction control means (24) for comparing said average of the actual signal arrival times with said expected signal arrival time and for generating said control signal in accordance with the comparison result, wherein said expected
10 signal arrival time is derived from said receiving clock.

10. An apparatus according to claim 9,
wherein said determining means (20) comprises storing means (22) for storing said plurality of detected actual
15 signal arrival times.

b 11. An apparatus according to claims 9 ~~or 10~~,
wherein said detecting means (20) comprises timer.

b 20 12. An apparatus according to ~~any one of claims 9 to 11~~,
wherein said correction control means (24) comprises a phase detector, and wherein a polarity of said control signal is changed in accordance with the result of comparison.

b 25 13. An apparatus according to ~~any one of claims 7 to 12~~,
wherein the asynchronous transmission is an ATM transmission and the signal is an ATM cell.